

Review of Australian and New Zealand Standard Research Classification (ANZSRC) – IRU Submission

Overview

The Australian and New Zealand Standard Research Classification (ANZSRC) is important for measurement and analysis of research and experimental development across fields and types of research, and for long-term analysis of research output and mix in Australia. To do this ANZSRC must provide a comprehensive and useful description of Australian research, while maintaining alignment and comparability with international standards.

Overall, the ANZSRC functions effectively to categorise the array of research in Australia. Its major limitation is when it is assumed to be the best classification to assess research output. Research that targets solving major issues often draws on multiple areas of expertise applied to the common challenge.

The Review of ANZSRC targets incremental improvements, being cautious not to depart from international and historical standards, while being open to changes which better describe the current status of Australia's research system. The classification should alter to reflect changes in research practices and emerging lines of research. Where changes are needed, the impact on time-series comparability should be addressed.

The IRU proposes three areas where changes to ANZSRC should be considered:

1. to capture more effectively the array of research on Indigenous issues;
2. to ensure balance across the classification by considering dividing the currently large medical research division; and
3. to address emerging fields and interdisciplinary research.

The IRU finally considers the ongoing value of the types of activity descriptions.

IRU Response

1. New Indigenous research classifications

The ANZSRC descriptions have notable gaps in how indigenous research is classified that acts against recognition of Indigenous knowledges and the extensive work to develop it in its own right and in its contribution to research across all fields. Current examples where we recognise the need to highlight and support Indigenous knowledges and research include:

- the ARC's Engagement and Impact 2018 exercise which included dedicated classifications for the economic, environmental, social and cultural impacts of indigenous research; and
- the Australian Government's 2018 *Research Infrastructure Investment Plan* which includes a specific scoping dedicated to indigenous platforms for Humanities, Arts and Social Sciences.

The ANZSRC descriptions for field of research categories are broad, making it difficult to locate actual or potential research contributions for indigenous research. As a result the ANZSRC structure recognises the contribution of indigenous research through dedicated 6-digit fields (e.g. health, education, cultural studies and fine arts), but most Australian research evaluations, such as ERA, are at a 2-digit or 4-digit level. The lack of an aggregated 4-digit group reduces the quality of data and visibility of indigenous research and indigenous researchers.

The National Aboriginal and Torres Strait Islander Higher Education Consortium (NATSIHEC) has developed a way to improve the classification to represent Indigenous research better. IRU supports NATSIHEC's proposal for:

- a dedicated 4-digit group for Indigenous Studies under Division 16 Studies in Human Society, and
- development of 7 six digit fields relevant to the Closing the Gap targets.

These changes would provide a point of focus for much research on Indigenous issues and also ensure it is identified within specific discipline areas.

2. Consider splitting Medical and Health Sciences Division into two

The size of the Medical and Health Sciences division may warrant dividing it into two.

The growth in Medical and Health Sciences research output make measuring, benchmarking and evaluating research in these areas difficult. ERA 2018 included more than 115,000 journal articles, book chapters and conferences papers within the 2-digit division 11 – Medical and Health Sciences. The 4-digit groups for Clinical Sciences, and Public Health and Health Services, each comprise roughly 25,000 to 30,000 outputs. On their own these sub-disciplines have more outputs than all but a handful of non-medical 2-digit divisions.

The argument responds to the practical question of ensuring some balance of research activity from Division to Division, and for the groupings within each. It needs to be balanced against the diversity versus commonality in methodology, techniques and perspectives of the medical and health sub-disciplines. One option is to use the classification from the Engagement and Impact 2018 exercise for Biomedical and Clinical Sciences, and Public and Allied Health Sciences that reflect two broadly distinct areas of focus, regardless of commonality in research approach.

3. New fields for emerging disciplines

The hierarchical and exclusive classification ANZSRC system facilitates comparison and evaluation, but their validity is increasingly challenged by the growth of research in new areas. IRU members have raised many examples which their submissions will highlight including:

- cybersecurity,
- forensic science,
- medical physics,
- palliative care, and
- data analytics.

These each require consideration, possibly balanced by downgrading areas with less research emphasis through combining some fields or removal with remaining research in the Other classification.

The challenge of the interdisciplinary nature of many research teams targeting complex problems remains. To a degree the issue is more to do with use of ANZSRC to structure assessments of research performance, than the classification itself. However, since that is a major use of ANZSRC it is a factor to be addressed in updating it.

Multiple fields can be selected and attributed their proportion of relative importance, but this is difficult for genuinely interdisciplinary research and new fields of research. The ANZSRC needs to allow flexibility to assign multiple FoR codes to capture interdisciplinary and transdisciplinary research. The ABS should provide more guidance about use of multiple codes to support consistent application and a better grasp of the extent of such research.

4. Types of activity

The discussion paper set out the four, long standing, types of research activity. These do not include the commonly used 'translational research' whose essence is to reflect the interaction of theoretical and empirical considerations, such that each stimulates the other. By contrast the descriptions of pure basic, strategic basic and applied research each assume a theory driven approach that has spill over into use, with no sense that the latter is an active contributor to the former.

Combined with the claim that much research crosses the various activity groups without any clear distinction between them in how research projects operate raises a challenge to the future relevance of the activity types.

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